

Element Performance Inspection (EPI) Data Collection Tool

5.1.8 Extended Range Operations with Two-Engine Airplanes (ETOPS) (AW)

ELEMENT SUMMARY INFORMATION

Purpose of this Element (certificate holder's responsibility):

- To ensure continuous safe and reliable operations in accordance with the certificate holder's Extended Range Operations with Two-Engine Airplanes (ETOPS) authorization.

Objective (FAA oversight):

- To determine the effectiveness of the certificate holder's procedures in meeting the desired output of the process.
- To determine if the certificate holder follows its procedures, controls, process measurements, and interfaces for the Extended Range Operations with Two-Engine Airplanes (ETOPS) program.
- To determine if there were any changes in the personnel identified by the certificate holder as having responsibility and/or authority for the Extended Range Operations with Two-Engine Airplanes (ETOPS) program.

Specific Instructions:

- To accomplish this EPI the inspector shall verify the certificate holder follows its policies and procedures for ETOPS program. The inspector shall verify that only trained and qualified personnel perform maintenance on ETOPS aircraft. The inspector shall verify technical data being used for ETOPS is current. The inspector shall verify the certificate holder reports all system failures/abnormalities with the ETOPS system to the FAA/Certificate Holding District Office.

Related EPIs:

- 1.1.1 Aircraft Airworthiness (AW)
- 1.1.2 Appropriate Operational Equipment (AW)
- 1.2.1 Airworthiness Release / Logbook Entry (AW)
- 1.2.2 Major Repairs and Alterations Records (AW)
- 1.2.3 Maintenance Log / Recording Requirements (AW)
- 1.2.4 MIS Reports (AW)
- 1.2.6 Aircraft Listing (AW)
- 1.3.1 Maintenance Program (AW)
- 1.3.2 Inspection Program (AW)
- 1.3.3 Maintenance Facility / Main Maintenance Base (AW)
- 1.3.4 Required Inspection Items (RII) (AW)
- 1.3.5 MEL / CDL / Deferred Maintenance (AW)
- 1.3.6 AD Management (AW)
- 1.3.7 Outsource Organization (AW)
- 1.3.8 Control of Calibrated Tools and Test Equipment (AW)
- 1.3.9 Engineering / Major Repairs and Alterations (AW)
- 1.3.10 Parts / Material Control / SUP (AW)
- 1.3.11 Continuous Analysis and Surveillance (CAS) (AW)
- 1.3.14 General Maintenance Manual / Equivalent (AW)
- 1.3.15 Reliability Program (AW)
- 1.3.19 Lower Landing Minimums (LLM) (AW)
- 1.3.20 Engine Condition Monitoring (AW)

- 1.3.21 Parts Pooling (AW)
- 1.3.22 Parts Borrowing (AW)
- 1.3.23 Short-Term Escalations (AW)
- 2.1.1 Manual Currency (AW)
- 2.1.2 Content Consistency Across Manuals (AW)
- 2.1.3 Distribution (Manuals) (AW)
- 2.1.4 Availability (Manuals) (AW)
- 4.1.1 RII Personnel (AW)
- 4.2.1 Maintenance Training Program (AW)
- 4.2.2 RII Training Requirements (AW)
- 5.1.1 Line Stations (AW)
- 5.1.9 RVSM Authorization (AW)

SUPPLEMENTAL INFORMATION

Specific Regulatory Requirements (SRRs):

- SRRs:
 - 119.33(a)(3)
 - 119.43(b)
 - 119.43(b)(1)
 - 119.43(b)(2)
 - 119.43(c)
 - 121.135(a)(1)
 - 121.135(b)(1)
 - 121.135(b)(2)
 - 121.135(b)(3)
 - D.086
 - D.086(a)
 - D.086(b)
 - D.086(c)
 - D.086(d)

Related CFRs & FAA Policy/Guidance:

- Related CFRs:
 - Intentionally left blank
- FAA Policy/Guidance:
 - FAA Order 8300.10, Volume 2, Chapter 82
 - FAA Order 8300.10, Volume 3, Chapter 43
 - Advisory Circular 120-42A
 - HBAW 00-15A
 - ETOPS Policy Letter EPL 20-1

EPI SECTION 1 - PERFORMANCE OBSERVABLES

Objective: (FAA oversight responsibility): The tasks and questions in this section of the data collection tool (DCT) are designed to assist the inspector in determining if the certificate holder follows its written procedures and controls and meets the established performance measures of the process. To accomplish this, questions have been generated to test both the outputs of the process as well as the process itself. Question 1 and its following subquestions are directed at the output(s) of the process, whereas questions 2-6, when answered, should be directed at the process itself

Tasks

	To meet this objective, the inspector must accomplish the following tasks:
1.	Review the information listed in the Supplemental Information section of this DCT.
2.	Review the policies, procedures, instructions, and information for the Extended Range Operations with Two-Engine Airplanes (ETOPS) program contained in the certificate holder's manual.
3.	Review the associated SAI for this element with emphasis on the controls, program measurements, and interface attribute sections.
4.	Observe the Extended Range Operations with Two-Engine Airplanes (ETOPS) program to gain an understanding of the procedures, instructions, and information contained in the certificate holder's manual.
5.	Discuss the Extended Range Operations with Two-Engine Airplanes (ETOPS) program with the personnel (other than management) who perform the duties and responsibilities required by the program.

Questions

	To meet this objective, the inspector must answer the following questions:	
1.	Determine whether the following performance measures were met:	
1.1.	Did the certificate holder comply with conditions and limitations of its approved Operations Specifications, paragraph D086?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.2.	Were ETOPS maintenance personnel trained and qualified for the specific certificate holder's procedures?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.3.	Was the maintenance accomplished in accordance with the certificate holder's approved ETOPS maintenance program?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.4.	Was the FAA Certificate Holding District Office (CHDO) notified of any system failures or abnormalities?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.5.	Were audits performed on the ETOPS program?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.6.	<p>Were the ETOPS aircraft configured and maintained in accordance with the manufacturer's type design and configuration standards for aircraft operating in an ETOPS environment?</p> <p><i>Related Performance JTIs:</i></p> <ol style="list-style-type: none"> Check at the Air Carrier Specified Location that the airplane met all requirements for configuration, maintenance, and procedures (CMP) for extended-range operations in accordance with the Certificate Holder's design. <i>Sources: 121.135(b)(19); 121.367; D.086(d)</i> Check at the Air Carrier Operated Maintenance Facility that the airplane met all requirements for configuration, maintenance, and procedures 	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

	<p>(CMP) for extended-range operations in accordance with the Certificate Holder's design. <i>Sources:</i> 121.135(b)(19); 121.367; D.086(d)</p> <p>3. Check at the Outsource Provider that the airplane meets all requirements for configuration, maintenance, and procedures (CMP) for extended-range operations in accordance with the Certificate Holder's design. <i>Sources:</i> 121.135(b)(19); 121.367; D.086(d)</p> <p>4. Check at the Aircraft that the airplane met all requirements for configuration, maintenance, and procedures (CMP) for extended-range operations in accordance with the Certificate Holder's design. <i>Sources:</i> 121.135(b)(19); 121.367; D.086(d)</p> <p>5. Check at the Records Repository that the airplane met all requirements for configuration, maintenance, and procedures (CMP) for extended-range operations in accordance with the Certificate Holder's design. <i>Sources:</i> 121.135(b)(19); 121.367; D.086(d)</p> <p>6. Check at the FAA Location then at the Air Carrier Specified Location that the Verification Program lists the primary systems in accordance with the Certificate Holder's design. <i>Sources:</i> 8300.10 Volume 2 Chapter 82 Section 2 Paragraph 5B(1)</p> <p>7. Check at the Aircraft that an ETOPS service check was accomplished in accordance with the Certificate Holder's design. <i>Sources:</i> Advisory Circular 120-42a Appendix 4 Paragraph 1a(2)(iii) Dated:12/30/88</p> <p>8. Check at the Air Carrier Operated Maintenance Facility Specified Location that an ETOPS service check was accomplished in accordance with the Certificate Holder's design. <i>Sources:</i> Advisory Circular 120-42a Appendix 4 Paragraph 1a(2)(iii) Dated:12/30/88</p> <p>9. Check at the Outsource Provider that an ETOPS service check was accomplished in accordance with the Certificate Holder's design. <i>Sources:</i> Advisory Circular 120-42a Appendix 4 Paragraph 1a(2)(iii) Dated:12/30/88 & Advisory Circular 120-42a Appendix 4 Paragraph 1a(2)(NOTE) Dated:12/30/88</p> <p>10. Check at the Air Carrier Specified Location that an ETOPS service check was accomplished in accordance with the Certificate Holder's design. <i>Sources:</i> Advisory Circular 120-42a Appendix 4 Paragraph 1a(2)(iii) Dated:12/30/88 & Advisory Circular 120-42a Appendix 4 Paragraph 1a(2)(NOTE) Dated:12/30/88</p> <p>11. Check at the Records Repository that an ETOPS service check was accomplished in accordance with the Certificate Holder's design. <i>Sources:</i> Advisory Circular 120-42a Appendix 4 Paragraph 1a(2)(iii) Dated:12/30/88 & Advisory Circular 120-42a Appendix 4 Paragraph 1a(2)(NOTE) Dated:12/30/88</p>	
2.	Were the certificate holder's policies, procedures, instructions, and information contained in its manual, for the Extended Range Operations with Two-Engine Airplanes (ETOPS) program followed?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
3.	Were the Extended Range Operations with Two-Engine Airplanes (ETOPS) program controls followed?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
4.	Did the records for the Extended Range Operations with Two-Engine Airplanes (ETOPS) program comply with the instructions provided in the certificate holder's	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

	<p>manual?</p> <p><i>Related Performance JTIs:</i></p> <p>1. Check at the Records Repository that ETOPS related tasks were identified on the operator's routine work forms and related instructions in accordance with the Certificate Holder's design.</p> <p><i>Sources:</i> Advisory Circular 120-42a Appendix 4 Paragraph 1a(2)(i) Dated:12/30/88</p>	
5.	<p>Were the process measurements for the Extended Range Operations with Two-Engine Airplanes (ETOPS) program effective in identifying problems or potential problems and providing corrective action for them?</p>	<p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No, Explain</p>
6.	<p>Did personnel properly handle the associated interfaces by complying with other written policies, procedures, instructions, and information that are related to this element?</p>	<p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No, Explain</p>

EPI SECTION 1 - PERFORMANCE OBSERVABLES Drop-Down Menu	
1.	Personnel.
2.	Tools and Equipment.
3.	Technical Data.
4.	Procedures, policies or instructions or information.
5.	Materials.
6.	Facilities.
7.	Controls.
8.	Process Measures.
9.	Interfaces.
10.	Desired Outcome.
11.	Other.

EPI SECTION 2 - MANAGEMENT RESPONSIBILITY & AUTHORITY OBSERVABLES	
Objective: To determine if the person identified by the certificate holder as having responsibility and/or authority for the Outsource Organization process is qualified, knowledgeable, and recognizes that responsibility and/or authority. (The person with the authority may or may not be the person with the responsibility.)	
Tasks	
	To meet this objective, the inspector must accomplish the following tasks:
	NOTE: If no personnel or major program changes (as defined by the principal inspector (PI)) affecting the responsibility or authority attributes for this element have occurred since the last SAI and/or EPI was accomplished, then do not perform tasks 3-6. Answer questions 1 and 2, and provide the name/title.
1.	Identify the person who has overall responsibility for the Extended Range Operations with Two-Engine Airplanes (ETOPS) program.
2.	Identify the person who has overall authority for the ETOPS program.
3.	Review the duties and responsibilities for the person(s) who manage the ETOPS program documented in the certificate holder's manual.
4.	Review the appropriate organizational chart.
5.	Discuss the Extended Range Operations with Two-Engine Airplanes (ETOPS) program with management personnel identified in tasks 1 and 2.
6.	Evaluate the qualifications and work experience of the management personnel identified in tasks 1 and 2.

Questions		
	To meet this objective, the inspector will answer the following questions:	
1.	Is there a clearly identified person who is responsible for the quality of the ETOPS program?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain Name/Title:
2.	Is there a clearly identified person who has authority to establish and modify the certificate holder's policies, procedures, instructions, and information for the ETOPS program?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain Name/Title:
3.	Does the responsible person know that he/she has responsibility for the ETOPS program?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> No Change
4.	Does the person with authority know that he/she has authority for the ETOPS program?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> No Change
5.	Does the person with responsibility for the ETOPS program meet the qualification standards?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> No Change
6.	Does the person with authority to establish and modify the ETOPS program meet the qualification standards?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> No Change

7.	Does the person with responsibility understand the controls, process measurements, and interfaces associated with the ETOPS program?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> No Change
8.	Does the person with authority understand the controls, process measurements, and interfaces associated with the ETOPS program?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> No Change
9.	Does the responsible person know who has authority to establish and modify the ETOPS program?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> No Change
10.	Does the individual with authority know who has the responsibility for the ETOPS program?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> No Change

EPI SECTION 2 - MANAGEMENT RESPONSIBILITY & AUTHORITY OBSERVABLES	
Drop-Down Menu	
1.	Assignment of responsibility.
2.	Assignment of authority.
3.	Does not understand procedures, policies or instructions and information.
4.	Does not understand controls.
5.	Does not understand process measurements.
6.	Does not understand interfaces.
7.	Span of control.
8.	Position vacant.
9.	Other.